

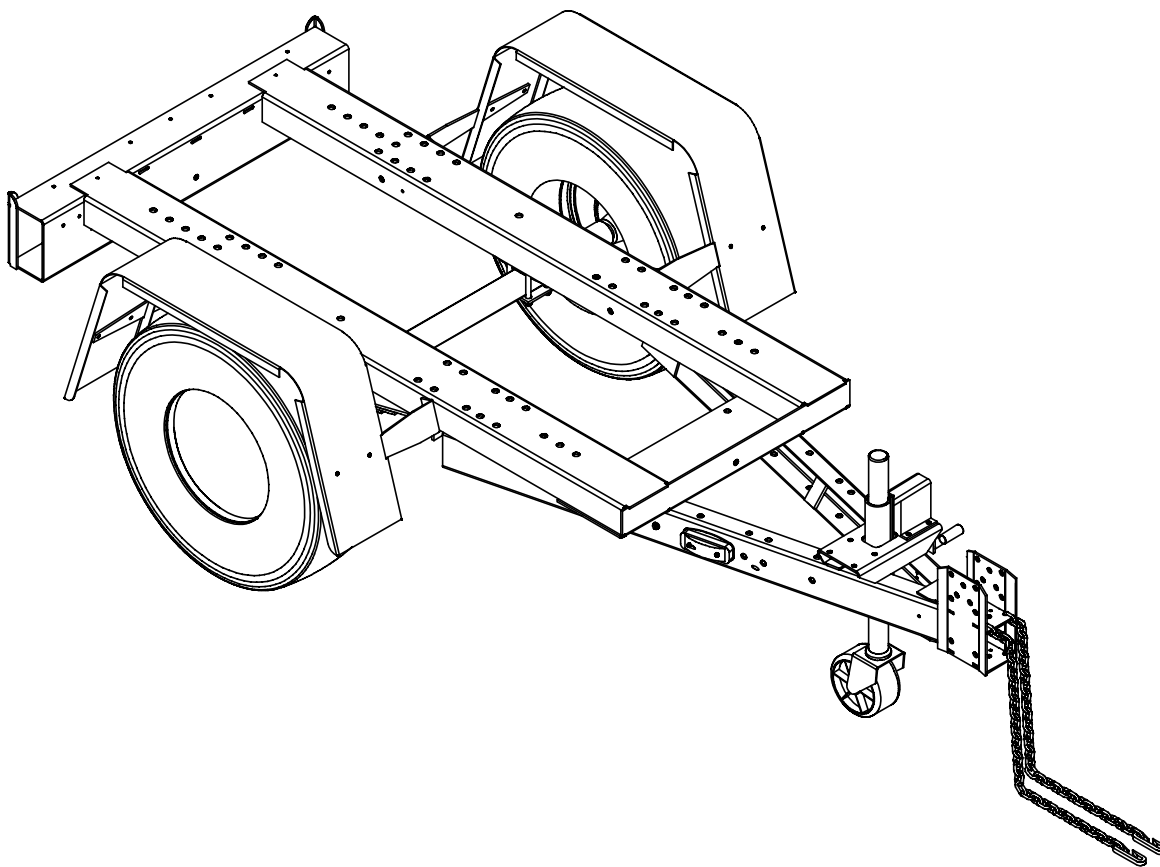
PARTS LIST FOR

**K953-1 TRAILER
ASSEMBLY**

K953-1 TRAILER ASSEMBLY



Index of Sub Assemblies	Index of Sub Assemblies	Index of Sub Assemblies	Index of Sub Assemblies
Illustration of Sub Assemblies	Illustration of Sub Assemblies	Illustration of Sub Assemblies	Illustration of Sub Assemblies



K953-1 TRAILER ASSEMBLY INSTRUCTIONS

SHOWN WITH OPTIONAL FENDER & LIGHT KIT
(FOR TRAILERS WITH ROUND AXLE)



IMPORTANT SAFETY NOTES:

This K953-1 trailer is designed to be used at highway speeds only with the following engine driven Lincoln welders: Ranger 10 and 300D, all Classics, Pipeliner 200G, SA250, 350 SA, and Commanders.

The mounted welder may be equipped with any standard Lincoln accessory kit and /or optional feature.

This trailer is designed for road, off road, in-plant and yard towing. If this trailer is to be used on public highways, check applicable county, state, and local laws regarding specific requirements which may include fenders, lights, reflectors, safety chains, brakes, etc.

Tow only with vehicles equipped for the weight and hitch type. Limit towing speeds to those at which the unit is stable. When towing, stop periodically and inspect hitch connections and trailer.

ASSEMBLY INSTRUCTIONS**TOOLS NEEDED**

One 3/4" or 19mm socket plus handle, one 3/4" or 19 mm box or open end wrench, one 13/16" hex or 21mm socket plus extension and handle, two 9/16 or 14mm wrenches, two 1/2" or 13mm wrenches, one 7/16" or 11 mm wrench, one 3/8" or 10 mm hex wrench, torque wrenches for 50 and 110 ft. lbs.

BASIC TRAILER AND COUPLER

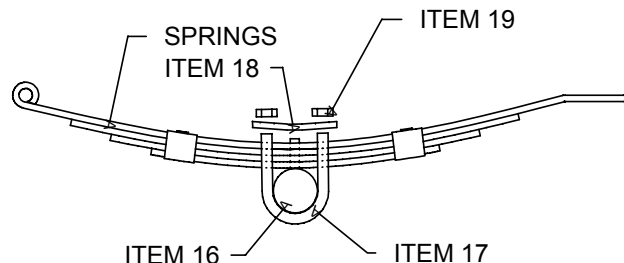
1. Assemble axle to springs with U-bolts, spring tie plates and 1/2-20 lock nuts. Squeeze U-bolts as needed to enter spring tie plates. Be sure that the spring center bolts are in the holes in the axle. Snug the lock nuts against the spring tie plates, then tighten the nuts in a crisscross fashion, then tighten them again. Give them two final tightenings to 45 ft-lbs after the weight of the welder is on the trailer.
2. Assemble wheels to hubs with nuts provided. Snug nuts, then tighten to 90-120 ft. lbs. Inflate tires to 30psi.
3. Crank the jack housing up and off the rack. Feed the rack up thru the trailer's jack stand, and then crank the housing back down over the rack. There should be NO binding. Mount the jack to the stand with hardware items 12 and 14. Note that handle can point either way; drivers' side is generally preferred.
4. If there are lights, do step 1 of "Fenders and Lights" page 3 now, otherwise, procede with step 5.
5. Mount the coupler parts to each other and to trailer using hardware items 20, 21 and 22. See coupler view 1 for various ways to connect for desired height. If a variety of vehicles will be towing the trailer, set height at 15"-23" with trailer level. Push up on the coupler when tightening hardware. Final torque should be 45 to 55 ft. lbs.

K953-1 TRAILER

ITEM	PART No.	DESCRIPTION	QTY.
1	L9869-1	TRAILER	1
2	M17863	CERTIFICATE OF ORIGIN	1
3	S21070	WHEELS & TIRES	2
5	T8291-7	1/2-13X7.00 BOLT	4
6	CF000030	1/2-13X1.25 BOLT	4
7	S9262-1	PLAIN WASHER	4
8	T9187-4	LOCK NUT (1/2-13)	4
9	S22072	SPEED NUT	4
10	E106A-15	LOCK WASHER	4
11	S22144	WHEELED JACK	1
12	CF000034	3/8-16X.75 BOLT	4
14	T9187-2	LOCK NUT (3/8-16)	4
15	G3000-1PRINT	ASSEMBLY INSTRUCTIONS	1
16	S22909	AXLE	1
	S22909MANUAL	AXLE SERVICE MANUAL	1
17	S22907	U-BOLT	4
18	S21062-2	SPRING TIE PLATE	2
19	T9187-11	LOCK NUT (1/2-20)	8

* OBTAIN THIS ITEM FROM YOUR LINCOLN ELECTRIC SALES OFFICE.

*

**K958-1
OPTIONAL 2" BALL COUPLER**

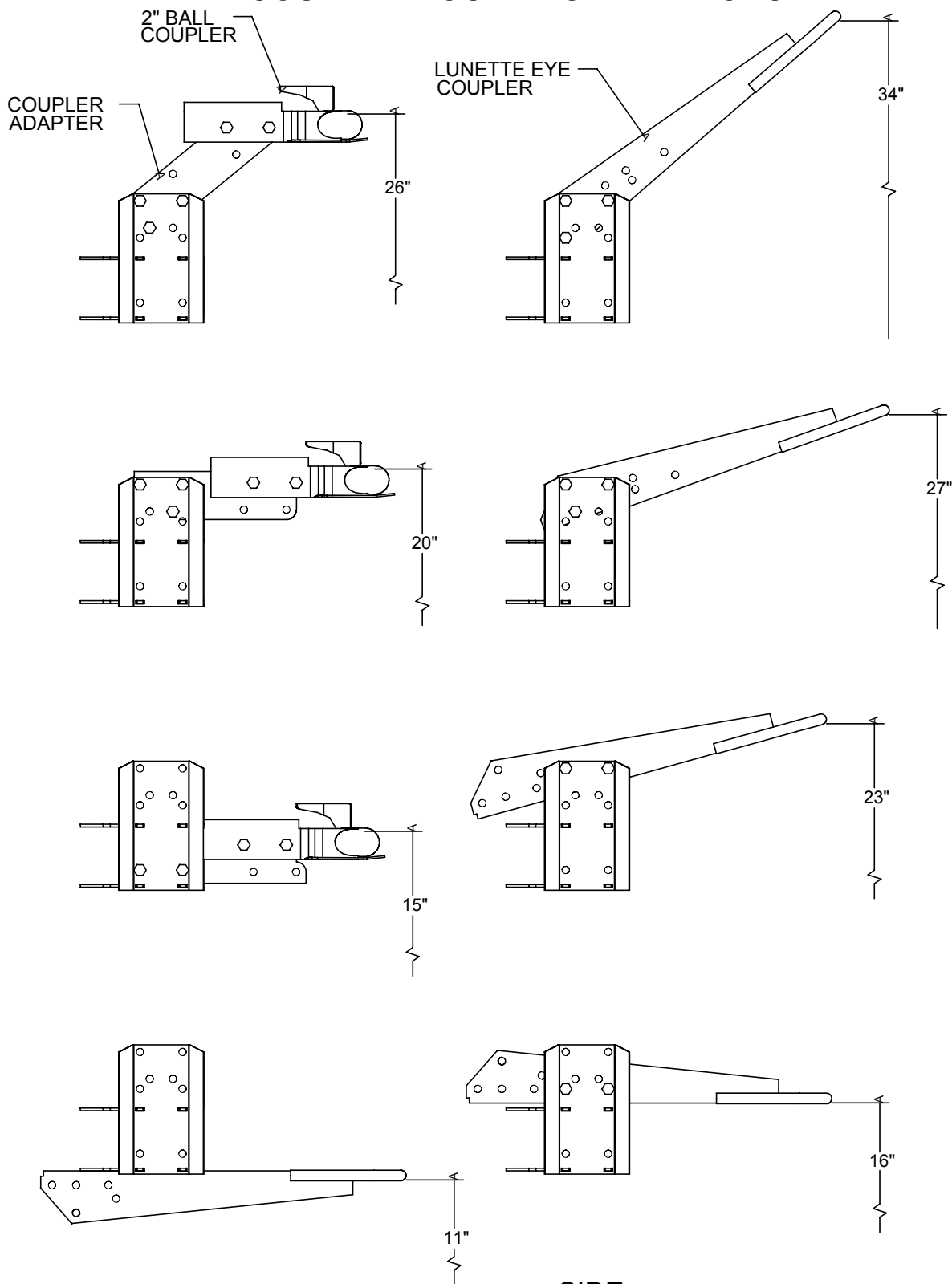
ITEM	PART No.	DESCRIPTION	QTY.
20	T8833-55	1/2-13X1.25 BOLT	10
21	T9187-4	LOCK NUT	10
22	E106A-15	LOCK WASHER	10
23	S23882PRINT	ASSEMBLY INSTRUCTIONS	1
24	S22143	COUPLER	1
25	M17861	COUPLER ADAPTOR	1

**K958-2
OPTIONAL LUNETTE EYE COUPLER**

ITEM	PART No.	DESCRIPTION	QTY.
20	T8833-55	1/2-13X1.25 BOLT	6
21	T9187-4	LOCK NUT	6
22	E106A-15	LOCK WASHER	6
23	S23882PRINT	ASSEMBLY INSTRUCTIONS	1
24	S22146	HITCH ASSEMBLY	1



COUPLER MOUNTING VARIATIONS

SIDE
VIEW 1LINCOLN
ELECTRIC

PAGE 2

FENDERS & LIGHTS

LIGHTS

- Put 20" piece of loom, item 39, over the 10' harness, feed harness and loom thru hole in trailer per view 2. Remove screw and washers from ground hole and discard; clean hole to bare metal if necessary. With stickout as shown, place ground lug between clamp item 45 and frame, tighten 1/4" x 3/4" screw, item 46, on ground lug first, then snug the other 1/4" x 3/4" screw to secure loom and harness.
- Mount lights.

Side marker lights: Remove and discard hardware from the mounting holes on each side of the "A" frame under the front of the platform. Clean around holes as needed to expose bare metal to the mounting bolt and nut. Force carriage bolts into slots in lights. Note that the bulb is toward the front of the trailer. Push small piece of sleeving, item 38, over the marker light wires and feed wires and studs thru appropriate holes. Put lock washers and nuts supplied with lights onto studs and tighten, holding lamps square during tightening. Be sure sleeving stays in place to protect wire from hole.

Tail and stop lights: Light with license plate illuminator is on left side. On rear bumper note two sets of 1/4" holes 2" apart, and a 1" hole. Remove and discard nuts and screws from the 1/4" holes next to the 1" holes and clean around the holes for a good ground. The colored wires go thru the 1" holes; the 1/4" carriage bolts are forced into the two appropriate slots on the lights, the ground lead is routed onto the bolt per a guide on the back of the light, and all are fed thru the holes on the rear bumper. Ground leads are routed through gaps in the shells of the lights. Place washers and nuts onto carriage bolts and tighten.

- Yellow and brown wires go along left side of trailer, green and brown go along right side of trailer. Place a 40" piece of 1/2" loom, item 40, on each branch of the harness as far forward as it will go. Feed loomed harness behind the steel braces in the frame. See view 3.
- Examine the 11 wire taps included in the harness kit. Two of them connect the marker light pigtails to the brown wires with no need to strip or separate the wires. The pigtail goes completely thru the channel by the hinge, the device snaps over the brown wire, the knife is squeezed down flush, and the flap closed over the connection. See view 4. Carefully trim off excess pigtail. Shove all into the loom and secure the pigtails with the two cable ties, item 47. Push the 5" pieces of 3/4" loom, item 44, over the lumps in the 1/2" loom.
- The 52" loom, item 41, goes over the harness, butting up against the 40" loom. The harness is fed thru the brace that goes from side to side of the "A". It is then fed thru 3/4 x 2" slots in a channel under the platform, behind a steel brace and over a 1/4" screw in the spring eye shackle. Push the 10" long 3/4" loom, item 43, over the 52" loom. Place the 1/2" x 5" loom, item 42, over the stop-tail light leads. Use 4 wire taps to connect the harness to the tail and stop light pigtails: pull wires thru wire taps to remove slack from harness, offset the taps from each other, then leaving about 1/2" slack in the harness, close the taps; trim wire ends. Slide the 3/4" loom back over the connections. Use the remaining 4 taps to connect the 40" harness to the vehicle; 5th tap is a spare.
- Test the lights. The most common problem is poor grounds.

FENDERS

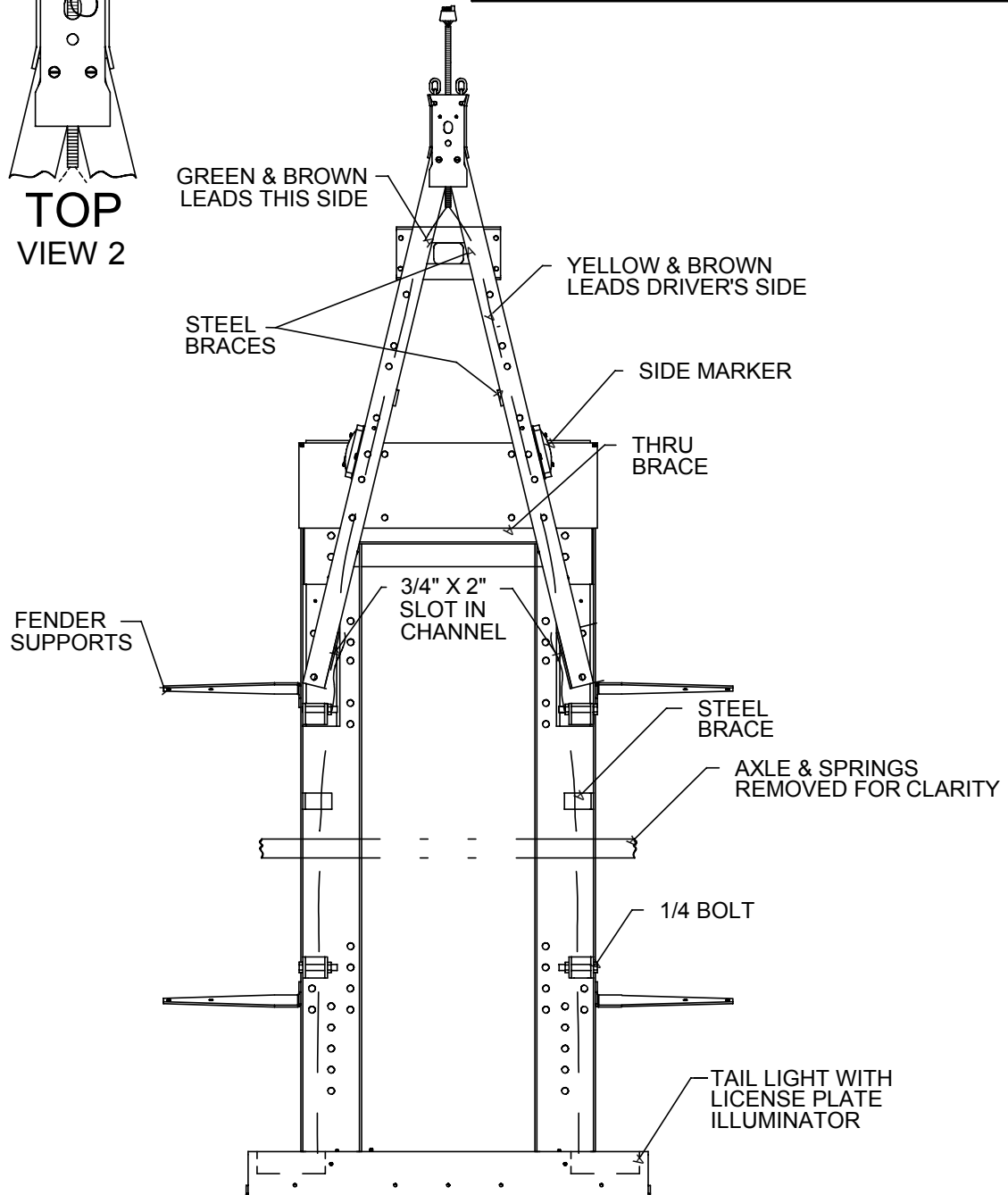
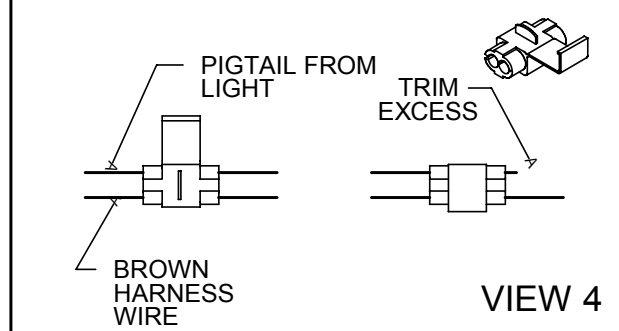
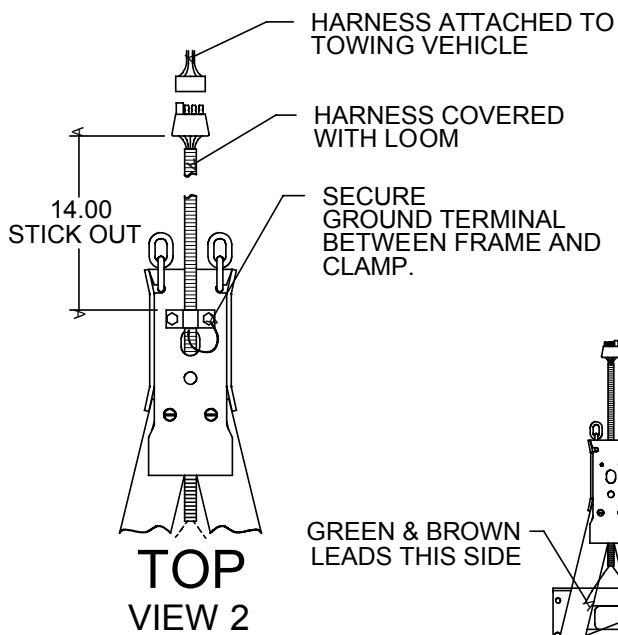
- Attach the fender mounts to the frame with hardware items 32, 33 and 34 -- snug, but not tight. Tilt at angle to match fenders. Slide fenders over the mounts and start the 5/16" x 5/8" screws, item 35, attach the nuts, item 36, and tighten. Tighten the 1/2" - 13 hardware.
- Hardware items 48, 49 and 50 are used to secure license plate to rear bumper.

K959-1 OPTIONAL FENDER AND LIGHT KIT

ITEM	PART No.	DESCRIPTION	QTY.
30	L9871	FENDER	2
31	M17862	FENDER SUPPORT	4
32	CF000021	1/2-13X1.00 BOLT	2
33	CF000359	1/2-13X4.50 BOLT	2
34	T9187-4	1/2-13 LOCK NUT	4
35	S9225-64	THREAD FORMING SCREW	8
36	T9187	5/16-18 LOCK NUT	8
37	M17925	LIGHT HARNESS KIT	1
38	CS000569	.15x2.00 SLEEVING	2
39	CS001628	.375-20.00 LOOM	1
40	CS001350	.50-40.00 LOOM	2

ITEM	PART No.	DESCRIPTION	QTY.
41	CS001612	.50-52.00 LOOM	2
42	CS001530	.50-5.00 LOOM	2
43	CS001467	.75-10.00 LOOM	2
44	CS001523	.75-5.00 LOOM	2
45	S22145	CLAMP	1
46	S9225-45	1/4 THD FORMING SCREW	2
47	T13770-3	CABLE TIE	2
48	T13548	NYLON NUT	2
49	S9262-98	FLAT WASHER	4
50	S9225-45	1/4 THD FORMING SCREW	2
51	G3000-1PRINT	ASSEMBLY INSTRUCTIONS	1



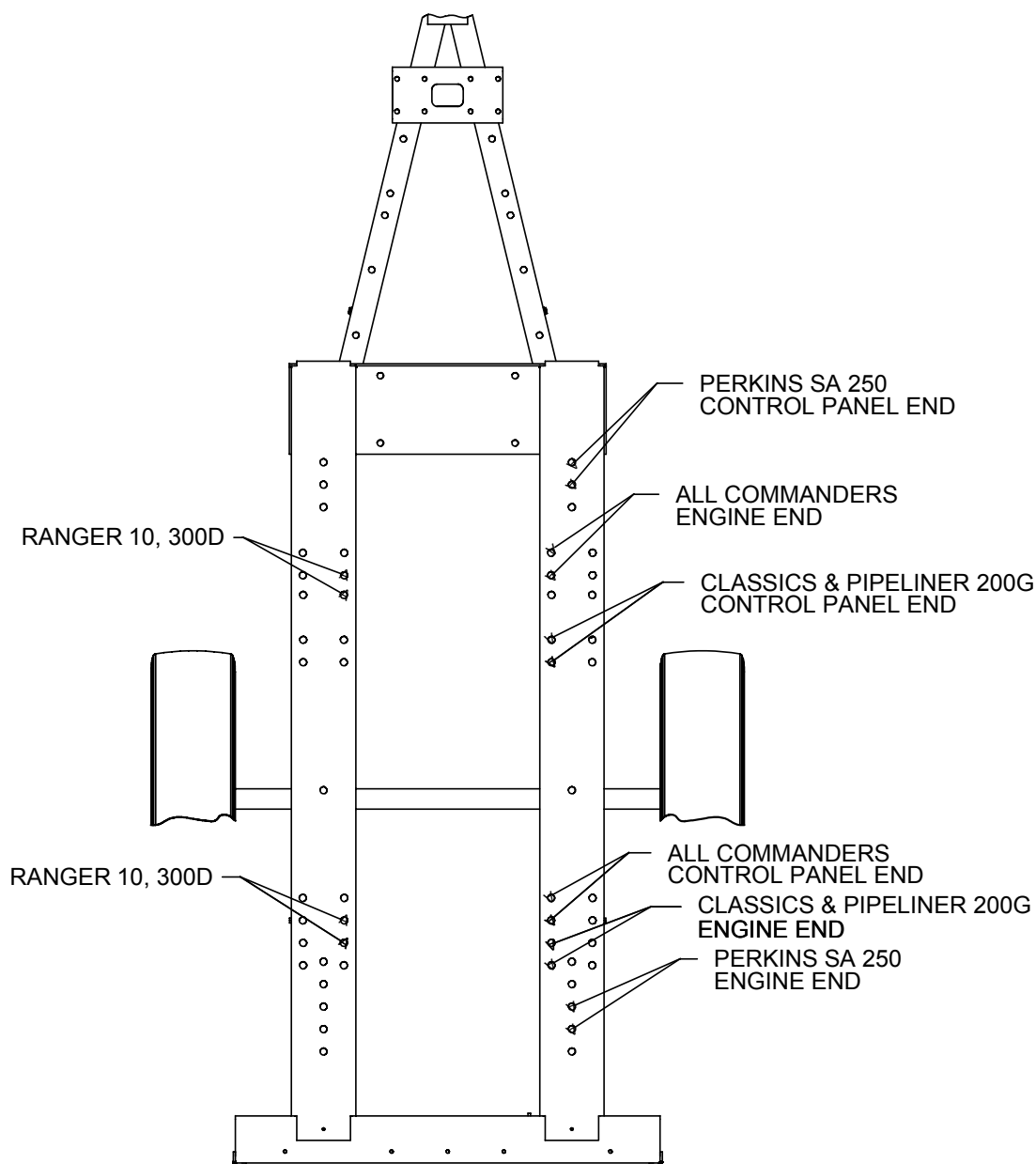


LINCOLN
ELECTRIC

PAGE 4

MOUNTING THE WELDER

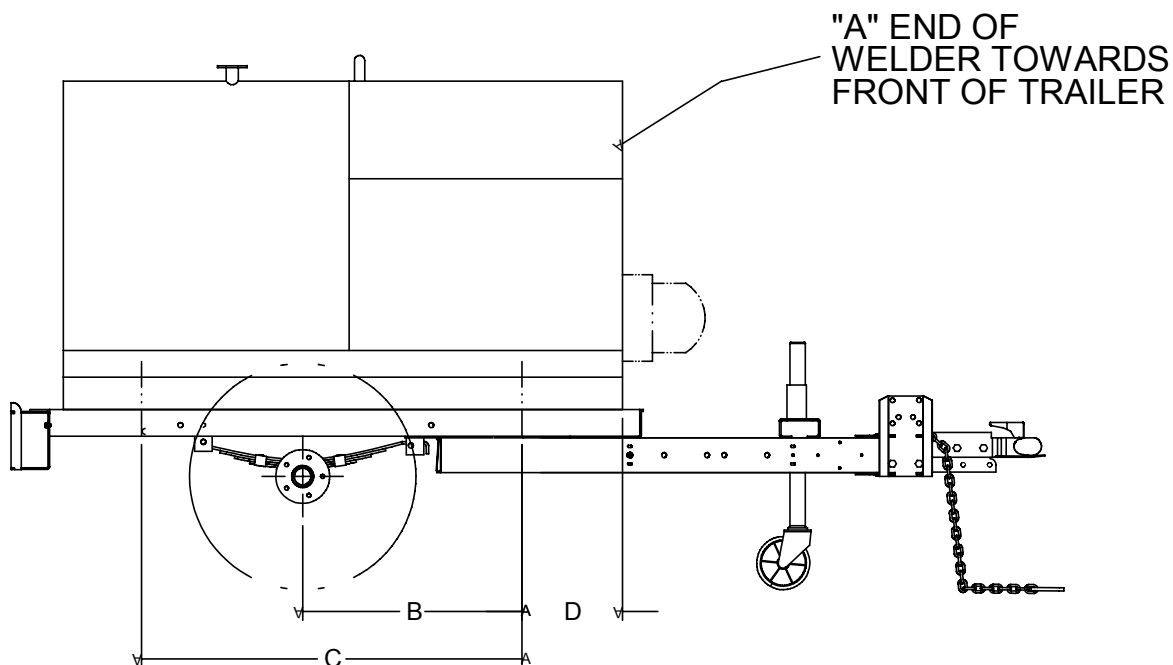
1. There are two sets of mounting holes for each welder; the forward set is to give the proper tongue weight for safe and stable highway towing; the rearward set (2 - 3" behind) gives lighter tongue weight for easier handling around the yard. See view 5. Hardware for all welders is included. Note the recommended location of control panel end and engine end; hole locations are correct only when welder faces the proper way. See view 6.
2. Rangers 10 and 300D, Pipeliner 200G and All Classics use hardware items 6, 7, and 8. Place one washer under each bolt head. SA250, 350 SA use hardware items 5, 7 and 8. Place one washer under each bolt head. Commanders use hardware items 6, 9 and 10, item 9 must be slipped into the base of the welder before placing it on the trailer. See view 7.
3. In all cases it is easiest to start one bolt and nut, then swing the welder into place for the others.
4. With the weight of the welder compressing the springs, tighten the U-bolt nuts (See page 1).

TOP
VIEW 5

PAGE 5

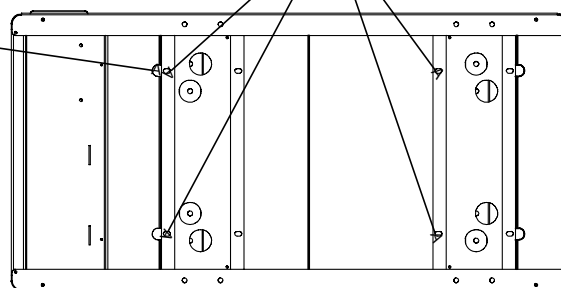
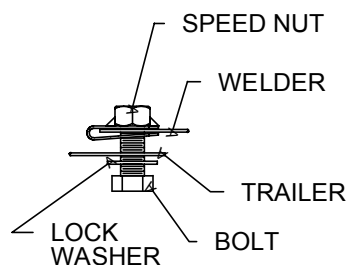
K953-1 TRAILER ASSEMBLY

11-6-2001

SIDE
VIEW 6

ALL COMMANDERS	ENGINE	21.15	19.25	30.75	14.65
SA-250, 350SA	CONTROL PANEL	29.20	27.20	48.50	8.00
ALL CLASSICS & PIPELINER 200G	CONTROL PANEL	13.40	11.40	27.00	18-22
RANGER 10, 300D	ENGINE	19.20	17.20	31.00	16.80
TYPE	A	HIGHWAY	YARD	C	D
		B			

START BOLTS THIS END FIRST WITH COUPLER
END OF TRAILER LOWERED SLIGHTLY. RAISE FRONT
OF TRAILER, START AND TIGHTEN FRONT BOLTS THEN
TIGHTEN REAR BOLTS.

MOUNTING
HOLESFRONT OF
TRAILER
ENGINE END OF
COMMANDERSWELDER BASE
(BOTTOM VIEW)BOTTOM
VIEW 7

MAINTENANCE

1. The wheel bearings should be repacked every 20,000 to 30,000 miles, or once a year, whichever occurs first. These bearings can be greased with a grease gun. Remove the rubber cover, grease with gun until clean grease is coming toward you. Dispose of dirty grease properly.
2. Inspect the trailer condition and fastener tightness every few miles for the first 50 miles, then 3000 miles or once a year, whichever occurs first.
3. Occasionally crank the jack to it's fullest height (never crank off the rack) and spray light oil into the housing.

K953-1 TRAILER REPLACEMENT PARTS

PART No.	DESCRIPTION	QTY.	
S21060-3	SPRING	2	*
S21065-1	SPRING SHOULDER BOLT	2	
S21065-2	SPRING SHOULDER BOLT LOCK NUT	2	
S22907	U-BOLT	4	***
S21062-2	SPRING TIE PLATE	2	
T9187-11	LOCK NUT (1/2-20)	8	
S22909	AXLE AND IDLER HUB ASSEMBLY	1	
CF000065	1/2-13X3.00 BOLT	2	
T9187-4	LOCK NUT (1/2-13)	2	
S21070	WHEEL AND TIRE (ST205/75D14 LOAD RANGE C)	2	
S21069-3	WHEEL NUT	1	
S22144	WHEELED JACK	1	
CF000034	3/8-16X.75 BOLT	4	
T9187-2	LOCK NUT (3/8-16)	4	JACK MOUNTING HARDWARE

* SPRINGS SHOULD BE ORDERED IN PAIRS AND NEW S21065-2 LOCKNUTS WILL BE PROVIDED.

***The Lincoln Electric Company recommends that you order the complete axle S22909. Axles will always be shipped with U-Bolts, nuts and tie plates. However, if you prefer to order parts for the 3" Dia. axles, you may order replacement hub assemblies from:

Redneck Trailer Supplies
705 Harrison Dr.
Columbus, Ohio 43204
Ph (614) 272-2220
Fax (614) 272-2245

Complete idler hub is their part no. #84545UC1-EZ

ORDER ALL TRAILER PARTS FROM THE LINCOLN ELECTRIC COMPANY
EXCEPT REPLACEMENT HUB COMPONENTS.



THE LINCOLN ELECTRIC COMPANY

World's Leader in Welding and Cutting Products
Sales and Service through Subsidiaries and Distributors Worldwide
Cleveland, Ohio 44117-1199 U.S.A.

9-7-2001B
G3000-1

NOTES

Index of Sub Assemblies

Index of Sub Assemblies

Index of Sub Assemblies

Index of Sub Assemblies

K953-1 TRAILER ASSEMBLY

